

PI 2281C / PI 2500C

Industrial Generating Set



Rev-1

MODEL	rpm / Hz	VOLTAGE	PRIME (1)	STANDBY (2)
PI 2281C / PI 2500C	1800 / 60	400 / 230	2281 kVA / 1825 kWe	2500 kVA / 2000 kWe

Full rated power available upto 100 meter elevation at ambient of 27degC, for other temperature and altitude limits please consult application team.

ENGINE SPECIFIC		
Rated Output (PRP)	1975 kW _m	
Rated Output (ESP)	2179 kW _m	
Engine Make & Mod	Cummins QSK60-G6	
No. of Cylinders	16 Cylinder, 60° Vee	
Cycle	4 Strokes	
Aspiration		Turbocharged and Low temp. Aftercooled
Cooling Method		Water
Governing Type		Electronic
Governing Class		G2 - ISO 8528 Part 1
Compression Ratio		14.5 : 1.0
Displacement		60.2 L / 3673 in ³
Bore/Stroke (mm / ir	1)	(159/190) / (6.25/7.48)
Electrical Starting Sys	stem	24 VDC starter motor
AIR SYSTEM		
Air Filter Type	Dry Element	
Combustion Air Flow	w (PRP)	161.1 m ³ /min
Combustion Air Flow		-
		161.1 m ³ /min
Combustion Air Flov	w (ESP)	161.1 m ³ /min 174.0 m ³ /min
Combustion Air Flow	w (ESP)	161.1 m ³ /min 174.0 m ³ /min
Combustion Air Flow Radiator Air Flow COOLING SYSTEM	w (ESP)	161.1 m³/min 174.0 m³/min 2040 m³/min
Combustion Air Flow Radiator Air Flow COOLING SYSTEM Total Coolant Capacitation	w (ESP)	161.1 m ³ /min 174.0 m ³ /min 2040 m ³ /min 159.0 L / 42.0 US gal
Combustion Air Flow Radiator Air Flow COOLING SYSTEM Total Coolant Capa Water Pump Type	w (ESP)	161.1 m³/min 174.0 m³/min 2040 m³/min 159.0 L / 42.0 US gal Centrifugal Eng-Driven
Combustion Air Flow Radiator Air Flow COOLING SYSTEM Total Coolant Capa Water Pump Type Radiator Fan Load	w (ESP) City om (PRP)	161.1 m³/min 174.0 m³/min 2040 m³/min 159.0 L / 42.0 US gal Centrifugal Eng-Driven 44 kW
Combustion Air Flow Radiator Air Flow COOLING SYSTEM Total Coolant Capa Water Pump Type Radiator Fan Load Heat Radiation to Ro	w (ESP) City om (PRP) om (ESP)	161.1 m³/min 174.0 m³/min 2040 m³/min 159.0 L / 42.0 US gal Centrifugal Eng-Driven 44 kW 190 Kw
Combustion Air Flow Radiator Air Flow COOLING SYSTEM Total Coolant Capar Water Pump Type Radiator Fan Load Heat Radiation to Ro Heat Radiation to Ro	om (PRP) om (ESP) STEM	161.1 m³/min 174.0 m³/min 2040 m³/min 159.0 L / 42.0 US gal Centrifugal Eng-Driven 44 kW 190 Kw
Combustion Air Flow Radiator Air Flow COOLING SYSTEM Total Coolant Capa Water Pump Type Radiator Fan Load Heat Radiation to Ro LUBRICATION SYS	om (PRP) om (ESP) STEM	161.1 m³/min 174.0 m³/min 2040 m³/min 159.0 L / 42.0 US gal Centrifugal Eng-Driven 44 kW 190 Kw 210 kW
Combustion Air Flow Radiator Air Flow COOLING SYSTEM Total Coolant Capac Water Pump Type Radiator Fan Load Heat Radiation to Ro Heat Radiation to Ro LUBRICATION SYSTEM Oil Filter Type	om (PRP) om (ESP) STEM	161.1 m³/min 174.0 m³/min 2040 m³/min 159.0 L / 42.0 US gal Centrifugal Eng-Driven 44 kW 190 Kw 210 kW

'	'		
FUEL SYSTEM			
Fuel Filter: Spin on full flow filter with water separator			
Recommended Fuel	Class A2 Diesel		
Fuel Consumption Star	521.0 L/hr /137.2 US gal/hr		
Fuel Consumption 100%	466.0 L/hr /123.1 US gal/hr		
Fuel Consumption 75% I	356.0 L/hr / 94.0 US gal/hr		
Fuel Consumption 50% I	247.0 L/hr / 65.3 US gal/hr		
EXHAUST SYSTEM			
Muffler Type		Residential Grade	
Max. Back Pressure		6.8 kPa	
Exhaust Gas Flow (PRP/	ESP)	399.0 / 439.2 m ³ /min	
Exhaust Gas Tempera	ature (P	RP/ESP) 460 / 475 °C	
ALTERNATOR SPECI	FICATI	ONS	
Rated Output (Prime) (1	1)	2506 Kva	
Rated Output (Stand by	y) ⁽²⁾	2606 Kva	
Alternator Make & Mod	el	Stamford S7L1D-G4 Wdg13	
Number of Poles		4	
Number of Winding Lea	ads	12	
Type of Bearing		Single	
Insulation Class / Temp	Insulation Class / Temp Rise		
Efficiency		96.3%	
Ingress Protection Rati	Ingress Protection Rating		
Excitation System		Separately Excited by P.M.G	
AVR Model	Stamfor	rd - MX341	
ALTERNATOR OPER	ATING	DATA	
Overspeed	Overspeed		
Voltage Regulation		± 1.0 %	
Wafeform distortion		No load <1.5% Linear load <5%	
Radio Interface	Standa	rd EN61000-6-2:2001	
Cooling Air Flow		2.87 m ³ /sec	

⁽¹⁾ **PRIME POWER RATING (PRP):** PRP is defined as the maximum power which a Generating set is capable of delivering continuously whilst supplying a variable electrical load when operated for an unlimited number of hours per year. The permissible average power output over 24 hours shall not exceed 70% of PRP unless otherwise agreed by RIC engine manufacturer. An overload capability of 10% of 100% of the prime rated electrical power is permitted for emergency use for a period of 1 hour within 12 hours of operation

⁽²⁾ EMERGENCY STANDBY POWER RATING (ESP): ESP is defined as the maximum power available during a variable electrical power sequence, under the stated operation condition, for which a generating set is capable of delivering power in the event of a utility power outage or under test condition for up to 200 Hours of operation per year. The permissible average output over 24 hour of operation shall not exceed 70 % of the ESP power rating noting that no over load is permitted.



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CONTROLLER SPECIFICATIONS			
Controller Make & Model		DeepSea 6120	
Operation Mode		MRS / AMF (optional)	
Display Graphic Bac		k-lit LCD (128x64) pixles	
Ingress Protection Rating		IP65	
Binary Inputs/Outputs		8/6	
Analog Inputs		4	
Measurement Vac, A, H		z, kVA, kW, Vdc	

Alarms log, Hrs log

USB

ENCLOSURE SPECIFICATIONS			
Enclosure Type	c & Weather Proof		
Anticorrosive Protection			
Polyester Powder Coated Galvanized Sheet			
Ingress Protection F	Ingress Protection Rating		
Lifting ISO Stan		dard Lifting	
Emergency External E		mergency Push Button	
Canopy RAL Color		RAL 2000	
Baseframe RAL Color		RAL 9011	
Noise Pressure level @ 7m		88 dB(A)	

GENSET DIMENSIONS & WEIGHT

GENSET TYPE	Length (mm)	Width (mm)	Height (mm)	Fuel Tank Capacity (L)	Dry Weight (kg)	Wet Weight (kg)
OPEN	6140	2885	3540	-	TPL	TPL
CLOSE	12000	3600	4780	-	26900	26980

STANDARD MECHANICAL FEATURES

Genset design provides a low noise level with an optimized performance of the ventilation and exhaust systems at 50 °C ambient temperature.

Robust structure design of Enclosure and Baseframe.

Hevy duty lifting lugs.

Event Log

Communication

Multi doors for easy access & maintenance.

Ingress Protection Rating according to BS EN 60529.

Heavy Duty Baseframe with built-in tank & forklift pockets.

Residential Grade Muffler with rain cap.

STANDARD ELECTRICAL FEATURES

An advance Control system is designed to provide a comperhensive protection and to monitor the parameters of generating set.

MCCB power circuit breaker.

Battery with charging alternator, cables, and tray.

Sealed harness & high resistant electrical connections.

Fast and accurate protection response.

Generating Set remote start function.

Numeric display with LED. Various languages capable.

OPTIONAL FEATURES

Advanced Controllers are available on request.

4 poles manual / Motorized Circuit breaker

Jacket water pre-heater

Static Battery Charger

Critical grade muffler

Fuel Filter / Water seperator Fuel Filter

Remote Annunciator

PRECISION INDUSTRIES

Application

Infrastructure, Industrial, Residential, Telecom, Defence, Mining, Agriculture,





